

CORRES. CONTROL
OUTGOING LTR. NO.

#000059096

DOE ORDER #

95-RF-07988

DIST.	LTR	ENC
BENSUSSEN, S.		
BUHL, T.		
CARD, R. G.		
MANI, V.		
MARTINEZ, L.		
MCKAY, B.		
O'BRIEN, G.		
TUOR, N.		
VOORHIES, G.		
WALLER, C.		

October 13, 1995



95-RF-07988

Jessie M. Roberson, Assistant Manager
Environmental Restoration
DOE, RFFO

ADMIN RECORD

COMMENT RESPONSES PROVIDED TO RESPOND TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) COMMENTS DATED SEPTEMBER 1, 1995, REGARDING THE CDPHE CONSERVATIVE RISK SCREEN FOR OPERABLE UNIT 3 (OU 3) - TGH-307-95

Action: Request comments be transmitted to regulatory agencies.

The enclosed comment responses are provided to respond to CDPHE comments dated September 1, 1995, regarding the CDPHE Conservative Risk Screen for OU 3. The September 1, 1995, comments are for responses previously submitted on June 23, 1995.

These comment responses should satisfy any concerns that the State may have regarding the application of the conservative screen for OU 3. It is expected that approval of the Conservative Screen for OU 3 will shortly follow your receipt of these comment responses.

Your immediate response is requested. Should you have any questions, please feel free to contact Stephen Hahn, of my staff, at extension 9888.

T. G. Hedahl
T. G. Hedahl, Director
ER/WM&I Operations

SJH:kam

Orig. and 1 cc - J. M. Roberson

Enclosure:
As Stated

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

cc: (w/o Enclosure)
R. J. Denike - RMRS
J. E. Law - "
A. M. Parker - "
R. Roberts - "
T. H. Spence - "
RMRS Records
ER Project Files (2)

CORRES. CTRL	X	X
TRAFFIC		
ADMIN. REC.		
PATS		

CLASSIFICATION:

UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER
SIGNATURE

Doc. Class. Rev.
Waiver per Class. Ofc.
Date: 10-13-95

IN REPLY TO RF CC NO:

None

ACTION ITEM STATUS

PARTIAL/OPEN
☒ CLOSED

LTR APPROVALS: *STH*

ORIG & TYPIST INITIALS

STH :kam

Kaiser-Hill Company, L.L.C.

Courier Address: Rocky Flats Environmental Technology Site, State Hwy. 93 and Cactus, Rocky Flats, CO 80007 • 303.966.7000

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A-DU03-000436

DRAFT

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Mr. Martin Hestmark
U. S. Environmental Protection Agency, Region VIII
ATTN: Rocky Flats Project Manager, 8HWM-RI
999 18th Street, Suite 500, 8WM-C
Denver, Colorado 80202-2405

Mr. Joe Schieffelin, Unit Leader
Hazardous Waste Control Program
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530

Gentlemen:

The enclosed comment responses are provided to respond to the Colorado Department of Public Health and Environment (CDPHE) comments dated September 1, 1995, regarding the CDPHE Conservative Risk Screen for Operable Unit (OU) 3. The September 1, 1995, comments are for responses previously submitted on June 23, 1995.

These comment responses should satisfy any concerns regarding the application of the conservative screen for OU 3. It is expected that approval of the Conservative Screen for OU 3 will shortly follow your receipt of these comment responses.

Should you have any questions, please feel free to call _____ at _____.

Introduction

These detailed responses are provided for the purpose of addressing formal comments from the Colorado Department of Public Health and Environment (CDPHE) regarding the comment responses on the CDPHE Conservative Screen Letter Report for OU 3. CDPHE comments are presented by comment number. U.S. Department of Energy (DOE) responses immediately follow the CDPHE comment.

CDPHE Comment #1

Page 11, step 2, spatial analysis section; No explanation was provided as to how the seven metals were spatially analyzed, similar to what was done in step 1. Please provide an explanation as to how each spatial analysis map was interpreted and justification as to why metals were eliminated as PCOCs. This is a particular concern for copper.

DOE Response to Comment #1

For each metal, concentrations in the sediment were first compared with the stream sediment UTL, the surficial soils UTL and the surface seep UTL. Then a comparison was made between the metal concentrations in the reservoir and those found across OU 3 and across the Rocky Flats Environmental Technology Site (RFETS). If all metal concentrations were below the UTLs and were indicative of OU 3 and RFETS concentrations, the metal was dropped from further consideration. If an exceedance of the highest UTL was seen, a spatial analysis was performed. If the spatial analysis shows that the UTL exceedance cannot be attributed to RFETS and is not indicative of adjacent concentrations of metals, the metal was dropped from further consideration. Also, the fact that Standley Lake receives about 90% of its water from the Central City/Clear Creek mining district means that elevated concentrations of metals in Standley Lake are probably not attributable to RFETS. Chemical concentrations in Mower Reservoir may have a more direct relationship to RFETS because it receives 100% of its water from RFETS.

Copper was examined with respect to the above methodology. Copper was carried to step 2 in the analysis because it could not be eliminated as a PCOC for Standley Lake. Copper was eliminated as a PCOC for Mower Reservoir. For copper, there were 4 detections of copper above the UTL for surface seeps out of 28 sample taken in Standley Lake. Since (1) Standley lake receives 90% of its water from another source than Rocky Flats, (2) the detection frequency for copper above the UTL is low, (3) the location of the detections for copper above the UTL were close to where Clear Creek enters Standley Lake and (4) that copper is not elevated in Mower Reservoir which receives all of its water from Rocky Flats, copper was not considered in the CDPHE conservative screen.

CDPHE Comment #2

Iron must be taken through to step 2 for Standley Lake. Although close in value, the subsurface mean is definitely higher than the background. Iron should be screened in a manner consistent with the other metals with values close to background, like selenium in Mower Reservoir. Therefore, a spatial map should be provided and interpreted for iron in Standley Lake.

DOE Response to Comment #2

It is not believed that iron should be carried through to the CDPHE conservative screen for four reasons. First, the maximum concentration of iron in the subsurface is equal to the background maximum concentration. This means that there are no detections of iron above the background range in Standley Lake. Second, iron is not elevated in Mower Reservoir. This would indicate that elevated iron concentrations in Standley Lake are not attributable to Rocky Flats. Next, spatial analysis of the enclosed iron distribution map illustrates that there are no trends that would indicate that RFETS is a source for iron contamination. Lastly, iron is an essential nutrient and has no toxicity factor associated with it. Therefore, the CDPHE screen would not be applicable to iron.

Distribution of Iron in Sediments and Soils

Iron Concentrations (Mg/Kg)

- 0 - 23,100 (SS UTL)
- △ 23,100 - 28,700 (Sed UTL)
- 28,700 - 110,600 (Seep UTL)
- ▲ > 110,600

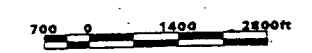
Standard Map Features

- ▨ Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- - - Rocky Flats boundary
- == Paved roads
- Major Roads
- Secondary Roads
- == RFETS Roads

DATA SOURCE:
 Analytical data comes from RFEDS, using general extraction method.
 Buildings, roads, and fences provided by Facilities Engr.
 EG&G Rocky Flats, Inc. - 1991.
 Hydrology provided by USGS - (date unknown)



Scale = 1 : 36650
 1 inch represents approximately 3054.16 feet



State Plane Coordinate Projection
 Colorado Central Zone
 Datum: NAD27

U.S. Department of Energy
 Rocky Flats Environmental Technology Site

Prepared by:

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 Geospatial Information Systems Group
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